

WASHINGTON AGRICULTURAL CHEMICAL USAGE GREEN PEAS, PROCESSING August 2003



WASHINGTON
AGRICULTURAL
STATISTICS
SERVICE

U.S. Department of
Agriculture
Washington Agricultural Statistics Service

GREEN PEAS, PROCESSING

Results of the 2002 Vegetable Chemical Use Survey are presented in the following tables. The survey was designed to collect data on chemical applications made from the end of the 2001 harvest through completion of the 2002 harvest from a sampling of vegetable growers in Washington.

Survey results include estimates of total area treated, number of applications, rates per application and per crop year, and total pounds of chemicals applied. Data are summarized for the active ingredients of pesticides and other chemicals applied. Pesticide data were collected for specific formulations of active ingredients (trade name products) and then converted to active ingredient. Therefore, the estimates associated with a particular active ingredient may represent applications of several trade name products. Pesticide application rates also reflect partial coverage applications as a result of band, spot, and alternate row spraying techniques. Nitrogen fertilizer was applied to 77 percent of the acreage in the five states surveyed. The highest percentage of nitrogen was applied in New York state on 97 percent of the acreage, and the lowest percentage applied was in

Minnesota on 65 percent of the acreage. Phosphate was applied to 52 percent of the acreage in the five states and potash was applied to 63 percent of the acreage in the five states.

Five states were surveyed for processing green peas in 2002: Minnesota, New York, Oregon, Washington, and Wisconsin. Surveyed acreage totaled 201,800 acres and Washington accounted for 19 percent of total surveyed acreage.

Herbicides were applied to 85 percent of the planted acreage of processing green peas. Across the five states surveyed, the application percentages ranged from 74 percent in Minnesota to 99 percent in Oregon. Pendimethalin, received the most coverage, on 40 percent of the crop. Imazethapyr, at 32 percent coverage, and bentazon, at 27 percent, were the next two most used herbicides. Insecticides were applied to 54 percent of the acreage. Zeta-cypermethrin was applied to 27 percent and dimethoate was applied to 17 percent of the green pea acreage. Fungicide use was minimal.

Green Peas, Processing: Fertilizer Use & Percent of Acres Treated by Major States for 2000 and 2002

State	Planted Acreage		Percent of Acres Treated 1/					
			Nitrogen		Phosphate		Potash	
	2000	2002	2000	2002	2000	2002	2000	2002
	Acres		Percent					
Minnesota	-	80,500	-	65	-	43	-	49
New York	-	21,300	-	97	-	95	-	99
Oregon	-	20,300	-	91	-	71	-	68
Washington	-	37,600	-	67	-	26	-	45
Wisconsin	-	42,100	-	92	-	62	-	84
TOTAL	-	201,800	-	77	-	52	-	63

1/ Refers to acres receiving one or more applications of a specific fertilizer ingredient. - Fertilizer use was not included in the 2000 Vegetable Chemical Use Survey.

Green Peas, Processing: Pesticide Applications, Total Acreage & Percentage Receiving Applications, Major States & Total, 2000 & 2002

State	Planted Acreage		Area Receiving 1/							
			Herbicides		Insecticides		Fungicides		Other Chemicals	
	2000	2002	2000	2002	2000	2002	2000	2002	2000	2002
	Acres		Percent							
Minnesota	95,100	80,500	96	74	63	72	**	**	**	**
New York	16,500	21,300	94	97	**	**	**	**	**	**
Oregon	34,900	20,300	80	99	85	98	24	**	**	**
Washington	51,300	37,600	98	88	59	70	9	**	**	**
Wisconsin	51,800	42,100	94	91	**	11	**	**	**	**
TOTAL	249,600	201,800	94	85	53	54	5	**	**	**

** Insufficient reports to publish percent of area receiving. 1/ Refers to acres receiving one or more applications of a specific pesticide class.

Green Peas, Processing: Ag Chemical Applications, Washington, 2000 & 2002 1/

Active Ingredient 2/	Area Applied 3/		Applications		Rate Per Application		Rate Per Crop Year		Total Applied	
	2000	2002	2000	2002	2000	2002	2000	2002	2000	2002
Herbicides	Percent		Number		Pounds Per Acre				1,000 Pounds	
Bentazon	25	43	2.5	1.0	0.55	0.12	1.42	0.12	18.3	2.0
Clomazone	-	2	-	1.0	-	0.18	-	0.18	-	0.1
Glyphosate	15	38	2.2	1.0	0.60	0.45	1.34	0.45	10.3	6.4
Imazethapyr	37	16	1.0	1.0	0.04	0.04	0.04	0.04	0.7	0.3
MCPA	38	25	1.0	1.0	0.25	0.35	0.27	0.36	5.4	3.4
Metribuzin	13	7	3.2	1.0	0.11	0.10	0.37	0.11	2.5	0.3
Quizalofop-P-ethyl	4	5	2.6	1.0	0.08	0.07	0.21	0.07	0.4	0.1
Triallate	24	-	1.0	-	1.21	-	1.21	-	14.8	-
Trifluralin	18	7	1.0	1.2	0.51	0.49	0.55	0.60	5.0	1.6
Insecticides										
Diazinon	-	3	-	1.0	-	0.33	-	0.33	-	0.4
Dimethoate	42	29	1.9	1.1	0.20	0.20	0.37	0.22	8.1	2.4
Esfenvalerate	20	31	2.4	1.0	0.04	0.04	0.09	0.04	0.9	0.4

1/ Planted acres in 2000 and 2002 for Washington were 51,300 acres and 37,600 acres, respectively.

2/ Insufficient reports to publish data for the following agricultural chemicals: 2000: Herbicides: 2, 4-D, Atrazine, Clomazone, Clopyralid, Cycloate, Dicamba, MCPB, Metolachlor, Pendimethalin, Phenmedipham, S-Metolachlor, Sethoxydim. Insecticides: Bifenthrin, Carbaryl, Chlorpyrifos, Diazinon, Malathion, Permethrin, Petroleum distillate, Phosmet. Fungicides: Benomyl, Captan, Copper ammonium, Copper hydroxide, Mancozeb. 2002: Herbicides: Atrazine, Halosulfuron, MCPB, Paraquat, Pendimethalin, Propachlor, Sethoxydim, Triallate. Insecticides: Ethoprop, Phosmet, Zeta-cypermethrin.

3/ Refers to acres receiving one or more applications of a specific agricultural chemical.

Note: Data may not multiply across due to rounding.

Green Peas, Processing: Agricultural Chemical Applications, Major States, 2000 & 2002 1/

Active Ingredient 2/	Area Applied 3/		Applications		Rate Per Application		Rate Per Crop Year		Total Applied	
	2000	2002	2000	2002	2000	2002	2000	2002	2000	2002
Herbicides	Percent		Number		Pounds Per Acre				1,000 Pounds	
Bentazon	20	27	1.4	1.0	0.68	0.11	0.98	0.11	48.5	6.0
Clomazone	5	6	1.0	1.0	0.47	0.44	0.47	0.44	5.8	5.0
Glyphosate	4	9	1.9	1.0	0.60	0.45	1.16	0.45	11.6	7.9
Imazamox	-	*	-	1.1	-	0.02	-	0.03	-	**
Imazethapyr	39	32	1.0	1.0	0.04	0.04	0.04	0.04	3.7	2.7
MCPA	10	6	1.0	1.0	0.25	0.33	0.26	0.33	6.8	3.9
MCPB	11	15	1.0	1.0	0.55	0.55	0.55	0.58	15.6	17.1
Metolachlor	4	-	1.0	-	1.18	-	1.26	-	12.7	-
Metribuzin	4	3	2.7	1.0	0.12	0.15	0.33	0.16	3.0	0.8
Pendimethalin	36	40	1.0	1.0	0.72	0.66	0.74	0.69	66.2	55.9
Quizalofop-P-ethyl	2	2	1.7	1.0	0.07	0.06	0.12	0.06	0.4	0.3
S-Metolachlor	4	3	1.0	1.0	1.02	1.24	1.09	1.24	10.4	7.5
Sethoxydim	3	6	1.0	1.0	0.22	0.27	0.22	0.27	1.5	3.1
Triallate	6	3	1.0	1.0	1.14	1.06	1.15	1.09	17.6	6.7
Trifluralin	23	15	1.0	1.0	0.45	0.46	0.49	0.47	27.6	13.9
Insecticides										
Bifenthrin	23	1	1.0	1.0	0.04	0.03	0.04	0.03	2.3	0.1
Diazinon	1	*	1.0	1.0	0.49	0.33	0.50	0.33	1.9	0.4
Dimethoate	22	17	1.4	1.2	0.19	0.19	0.27	0.24	14.5	8.5
Esfenvalerate	14	8	1.6	1.0	0.03	0.03	0.05	0.03	1.9	0.5
Phosmet	*	-	1.2	-	0.73	-	0.91	-	1.9	-
Piperonyl butoxide	6	-	1.0	-	0.19	-	0.19	-	2.6	-
Pyrethrins	6	-	1.0	-	0.02	-	0.02	-	0.2	-
Zeta-cypermethrin	-	27	-	1.0	-	0.05	-	0.05	-	2.6
Fungicides										
Copper hydroxide	*	-	1.2	-	0.92	-	1.13	-	1.4	-

* Area applied to less than one percent. ** Total applied is less than 50 pounds. Rate is less than .0005 pounds per acre.

1/ Planted acres in 2000 and 2002 for the 5 major states were 249,600 acres and 201,800 acres respectively. The states included in both 2000 and 2002 were MN, NY, OR, WA, and WI.

2/ Insufficient reports to publish data for the following agricultural chemicals: 2000: Herbicides: 2, 4-D, Alachlor, Atrazine, Clopyralid, Cycloate, Dicamba, Napropamide, Phenmedipham. Insecticides: Carbaryl, Chlorpyrifos, Endosulfan, Malathion, Permethrin, Petroleum distillate. Fungicides: Benomyl, Captan, Copper ammonium, Copper sulfate, Mancozeb, Sulfur, Vinclozolin. 2002: Herbicides: Atrazine, EPTC, Glyphosate diam salt, Halosulfuron, MCPA, dimethyl. salt, Paraquat, Propachlor. Insecticides: Ethoprop, Malathion, Petroleum distillate, Phosmet.

3/ Refers to acres receiving one or more applications of a specific agricultural chemical. Note: Data may not multiply across due to rounding.